

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) Device for hot dip coating a metal strand (1), in which the metal strand (1) is passed vertically through a coating tank (3) that contains the molten coating metal (2) and through a guide channel (4) upstream of the coating tank, with at least two inductors (5) installed on both sides of the metal strand (1) in the area of the guide channel (4) for generating an electromagnetic field in order to keep the coating metal (2) in the coating tank (3) and with at least one sensor (6, 6') for determining the position (s) of the metal strand (1) in the area of the guide channel (4), wherein the sensor for determining the position of the metal strand (1) consists of two coils (6, 6'), which are installed, as viewed in the direction of conveyance (R) of the metal strand (1), within the height (H_0) of the inductors (5) above a vertical midpoint of the inductors, and between the inductors (5) and the metal strand (1) at a distance from a center line of the guide channel that is smaller than a smallest distance of the inductors from the center line so that the coils (6, 6') are spaced in a direction of the center line

completely from an innermost surface of the inductors (5) facing the center line, the sensor not being connected to the inductors.

2. (Previously presented) Device in accordance with Claim 1, wherein the coils (6, 6') and the inductors (5) are arranged symmetrically with respect to the center plane (7) of the guide channel (4).

3. (Previously presented) Device in accordance with Claim 1, wherein the coils (6, 6') are the same and are designed as wire windings without a core.

4. (Previously presented) Device in accordance with Claim 3, wherein the coils (6, 6') have one or more windings.

5. (Previously presented) Device in accordance with Claim 3, wherein the wire of the coils (6, 6') is made of copper.

6. (Previously presented) Device in accordance with Claim 3, wherein the windings of the coils have a circular, oval or rectangular shape.

7. (Previously presented) Device in accordance with Claim 1, wherein the coils (6, 6') are connected to a measuring device (8) for measuring the voltages (U_{Ind1} , U_{Ind2}) induced in the coils (6, 6').

8. (Previously presented) Device in accordance with Claim 7, wherein the measuring device (8) is designed for the high-impedance measurement of the voltages (U_{Ind1} , U_{Ind2}) induced in the coils (6, 6').

9. (Previously presented) Device in accordance with Claim 7, wherein the measuring device (8) has a subtractor (9), with which the difference (U_{Ind}) of the two voltages (U_{Ind1} , U_{Ind2}) induced in the coils (6, 6') can be determined.

10. (Previously presented) Device in accordance with Claim 1, wherein several pairs of coils (6, 6') are installed, as viewed in the direction of conveyance (R) of the metal strand (1), within the height (H_0) of the inductors (5) and between the inductors (5) and the metal strand (1).

11. (Currently Amended) Method for hot dip coating a metal strand (1), in which the metal strand (1) is passed vertically

through a coating tank (3) that contains the molten coating metal (2) and through a guide channel (4) upstream of the coating tank; in which an electromagnetic field is generated by at least two inductors (5) installed on both sides of the metal strand (1) in the area of the guide channel (4) in order to keep the coating metal (2) in the coating tank (3); and in which the position (s) of the metal strand (1) in the area of the guide channel (4) is determined with at least one sensor (6, 6'), wherein to determine the position of the metal strand (1), two coils (6, 6') are provided, which are installed, as viewed in the direction of conveyance (R) of the metal strand (1), within the height (H_0) of the inductors (5) above a vertical midpoint of the inductors, and between the inductors (5) and the metal strand (1), and the voltages (U_{Ind1} , U_{Ind2}) induced in the coils (6, 6') are measured, the difference between the measured voltages is taken, and the resulting value is used to derive an indicator for the position of the metal strand (1) at a distance from a center line of the guide channel that is smaller than a smallest distance of the inductors from the center line so that the coils (6, 6') are spaced in a direction of the center line completely from an innermost surface of the inductors (5) facing the center line,
the sensor not being connected to the inductors.